

## REMARKS

The foregoing amendments and the following comments are responsive to the objections and rejections set forth by the Examiner in the November 9, 2004 Office Action. Reconsideration and further examination are respectfully requested.

### I. REVOCATION OF POWER OF ATTORNEY AND CHANGE IN CORRESPONDENCE ADDRESS

The Applicant had previously filed a Revocation of a Power of Attorney and a change in correspondence address on this Application prior to the date of the Office Action, a copy of which is attached. However, the Office Action dated November 9, 2004 was mailed to the Applicant's previous counsel and previous correspondence address. The Applicant requests that Applicant's current correspondence address be confirmed to be as shown in the attached Revocation of Power of Attorney.

### II. EXAMINATION OF THE CLAIMS

Claims 1-22 are pending in this application. Claims 1, 2, 6, 9, 13, 17, 19 & 22 are independent claims. The Examiner rejected Claims 1-22. In particular, the Examiner rejected Claims 1-7, 9, 17, 19 & 22 under 35 U.S.C. § 103(a) as being unpatentable over Berenguel et al. (U.S. Patent Number 5,241,508) ("Berenguel"). Further, the Examiner rejected Claims 8, 10-16, 18, 20 & 21 under 35 U.S.C. § 103(a) as being unpatentable over Berenguel as applied to Claims 1-7 of the Application, and further in view of Li et al. (U.S. Patent Number 6,336,174) ("Li").

Turning to the references cited in the Office Action, the object of Berenguel is to prevent the loss of data stored in a volatile (here a SCSI RAM-based) storage unit when an inadvertent interruption of power to the storage unit occurs. When main power to the host system and volatile memory is interrupted, data stored in the volatile memory is automatically transferred to a disk on the host system where it is stored until power is restored. When main power is restored, the data is automatically returned from the host system to the volatile memory. Berenguel uses two separate and independent SCSI channels and two SCSI controllers to provide communication between the volatile memory and the host and between the volatile memory and a Winchester disk residing on the host. Berenguel is not understood to disclose or suggest data prevention in non-volatile memory, nor is it understood to disclose or suggest that the volatile

memory will be isolated from the host in the case of a power loss. In fact, the opposite is true. Berenguel is understood to maintain connection with the host in order to store data on the Winchester disk residing on the host in the even of a power failure.

Li teaches a memory back-up method for volatile memory, such as RAM. Li teaches that, only during a system catastrophe, all or portions of the data in the volatile memory are temporary written to non-volatile memory and then re-written to the volatile memory when the catastrophe has passed. Li specifically disclaims being a non-volatile or flash memory system by stating that a store operation on non-volatile memory will only be performed if there is catastrophic failure to preserve the life span of non-volatile memory. Accordingly, Li discourages the use of a non-volatile device unless catastrophic conditions are encountered.

Both Berenguel and Li are inappropriate references because they are directed to preventing data loss in volatile memory without any disclosure, suggestion or motivation to prevent data loss in non-volatile memory. There is no motivation or suggestion in either Berenguel or Li that the two references should be or can be combined. Finally, neither Berenguel nor Li contain all the claimed features of the invention and the Examiner has not outlined a specific individual correspondence between the elements of the references and the claimed features of the invention.

### **III. PATENTABILITY OF THE PENDING CLAIMS**

#### **A. Claim 1 and 22**

The Examiner states that Berenguel teaches “a method and apparatus which connects a volatile memory to a host memory via an SCSI interface. He thus teaches the limitations pertain to a data preservation system for flash memory with a host system.” This is an inaccurate conclusion because a flash memory is a non-volatile memory, not volatile memory. Therefore, Berenguel does not disclose or suggest this limitation.

The Examiner further states that Berenguel teaches “that the battery powers the RAM bank and DISK until all of the contents in RAM have been transferred to DISK. He thus teaches limitations upon loss of the host system power supply, the flash memory system actively isolates the connection to the host system power supply and isolates the interface bus and employs supplemental energy store to complete write operations to flash memory.” That conclusion is

inaccurate. Berenguel does not teach the isolation of the connection to the host system or the isolation of the interface bus, in fact the opposite is true, because Berenguel stores the data to a disk residing on the host system. In order for the invention in Berenguel to operate, the interface bus to the host must be maintained, which is contrary to Claims 1 and 22 where the interface bus is isolated.

As explained above, Berenguel does not disclose, teach or suggest several limitations of Claims 1 and 22, and accordingly, the Applicant submits that Claims 1 and 22 are not obvious in view of Berenguel.

**B. Claims 2 & 17**

The Examiner states that Berenguel teaches “that the battery powers the RAM bank and DISK until all of the contents in RAM have been transferred to DISK. He thus teaches limitations pertain to an auxiliary power source, an isolation circuit isolating the auxiliary power source upon a power failure.” That conclusion is inaccurate. Berenguel does not teach an isolation circuit or an isolator because the system in Berenguel maintains connection to the host system in order to save the data on the disk residing on the host system. Berenguel does not disclose or suggest isolation from the host system because Berenguel stores the data to a disk residing on the host system. In order for the invention in Berenguel to operate, the interface bus to the host must be maintained, which teaches away from Claims 2 and 22 where the interface bus is isolated.

As explained above, Berenguel does not disclose, teach or suggest several limitations of Claims 2 and 17, and accordingly, the Applicant submits that Claims 2 and 17 are not obvious in view of Berenguel.

**C. Claims 3-5**

Claims 3-5 which depend from Claim 2, are believed to be patentable for the same reasons articulated above with respect to Claim 2, and because of the additional features recited therein.

D. Claim 18

Claim 18 which depends from Claim 17, is believed to be patentable for the same reasons articulated above with respect to Claim 17, and because of the additional features recited therein.

E. Claims 6, 9 & 19

For similar reasons as articulated in regards to Claims 1, 2, 17 & 22, Berenguel does not disclose, teach or suggest the limitations of Claims 6, 9 & 19 including isolating (or decoupling as per Claim 19) auxiliary power or interface. In fact Berenguel teaches away from this because the non-volatile memory in Berenguel is on the other side of the external communication – residing on the host system.

F. Claims 7-8

Claims 7-8 which depend from Claim 6, are believed to be patentable for the same reasons articulated above with respect to Claim 6, and because of the additional features recited therein.

G. Claims 10-12

Claims 10-12 which depend from Claim 9, are believed to be patentable for the same reasons articulated above with respect to Claim 9, and because of the additional features recited therein.

H. Claims 20-21

Claims 20-21 which depend from Claim 19, are believed to be patentable for the same reasons articulated above with respect to Claim 19, and because of the additional features recited therein.

I. Claim 13

For similar reasons as articulated in regards to Claims 1, 2, 17 & 22, Berenguel does not disclose, teach or suggest the limitations of Claim 13 including isolating the non-volatile memory from external communication. In fact Berenguel teaches away from this because the non-volatile memory in Berenguel is on the other side of the external communication – residing on the host system.

J. Claims 14-16


Claims 14-16 which depend from Claim 13, are believed to be patentable for the same reasons articulated above with respect to Claim 13, and because of the additional features recited therein.

**IV. CONCLUSION**

In view of the forgoing, the present application is believed to be in condition for allowance, and such allowance is respectfully requested. If further issues remain to be resolved, the Examiner is cordially invited to contact the undersigned such that any remaining issues may be promptly resolved.

Respectfully submitted,

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